

PLASMA TECHNOLOGY AS A NEW PRESERVATION TECHNIQUE

R. Rincón and M. D. Calzada

Grupo de Espectroscopía de Plasmas. Campus de Rabanales.14071 Córdoba (Spain)

E-mail: md.calzada@uco.es

Consumers are increasingly aware of the health benefits and risks associated with consumption of food. To meet consumers' expectations, the food industry is devoting considerable resources and expertise to the production of wholesome and safe products.

The aim of our research has been to introduce Plasma Technology as a new food Preservation Technique. For this reason, it has been assessed the action of a surface wave discharge generated at atmospheric pressure on browning of sherry Fino wine and growth rate in lentils. In this study emission Spectroscopy techniques were used.

As far as sherry Fino wine samples treated is concerned, it has been found that the application of active species in an Ar-N₂ (2%) postdischarge manages to keep the characteristic pale yellow colour of this wine avoiding its browning. As for treatments in lentils, it has been demonstrated that the joint effort of both active species and UV radiation from an Ar-N₂O (1%) plasma has inhibited the germination of lentils.

According to the results obtained in this research, there seems to be enough evidence to suggest that Plasma Technology could be consider as a new Preservation Technique.

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